



**BUILDING A SMARTER
ECOTOURISM BUSINESS**

AIMS & OBJECTIVES

Aim: This module aims to present the ways in which digital technology can benefit ecotourism businesses.

Objectives:



Understanding the benefits of using digital technology in one's ecotourism business.



Identify areas of activity that can be improved using digital technology.



Explore ways in which digital technology can make a business more efficient, more sustainable, safer and more accessible for people with disabilities.



What Is Smart Tourism?

In the age of smartphones and digital communication, the tourism industry has also undergone a digital transformation.

SMART TOURISM refers to the application of digital information and communication technology (ICT) for developing innovative tools and approaches to improve tourism. This can include the use of mobile communication, cloud computing, big data, the internet of things, artificial intelligence, virtual and augmented reality etc.



By harnessing these technologies, Smart Tourism aims to optimize processes and make tourism safer and more sustainable.

The concept of *smart tourism* is most often used in relation to *destinations* and the notion of *smart cities*.



The European Union defines smart tourism as a destination facilitating access to tourism and hospitality products, services, spaces and experiences through ICT-based tools.



[Sourced from www.publicissapient.com](http://www.publicissapient.com)

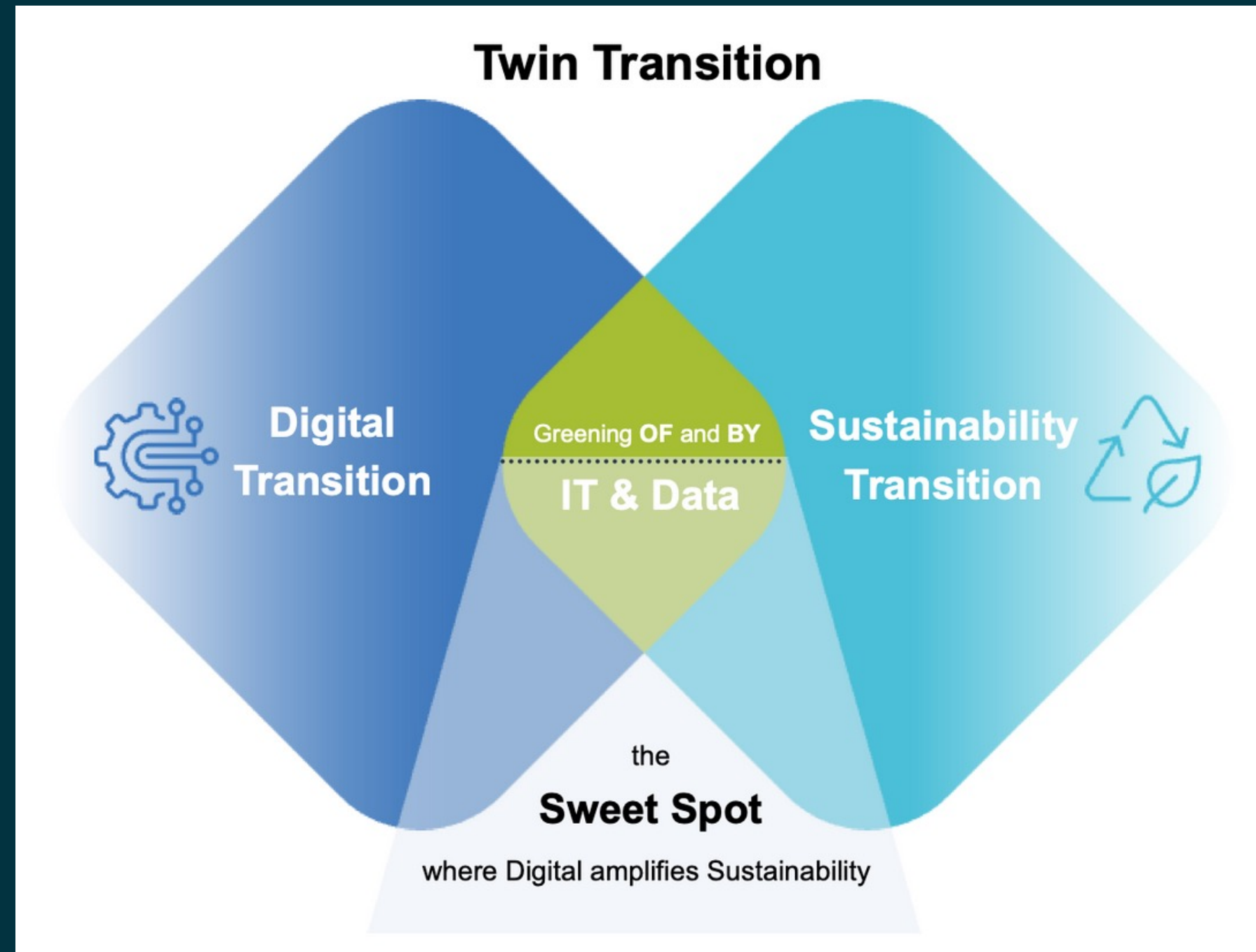


[Sourced from www.hlp.city](http://www.hlp.city)

As an ecotourism business owner, you may wonder why technology is relevant to your mission of protecting the environment. However, technology can play a critical role in helping you scale your business and promoting sustainability by:

- 1 improving the functioning of the business and making processes more efficient to save time and costs through management tools
- 2 providing exposure and visibility through digital marketing, social media, and online platforms, attracting more customers and promoting ecotourism
- 3 optimizing resource use, including energy and water consumption, reducing paper use, facilitating alternative means of transport, and supporting sharing economy practices
- 4 enhancing the visitor experience while reducing overcrowding, providing education about the environment and local culture and making tourism more accessible for people with disabilities through assistive technologies





Digital technologies present enormous growth potential for Europe, as well as a means of achieving sustainability. Moreover, the COVID pandemic highlighted how much Europe needs to achieve technological independence and not depend on solutions coming from other parts of the world.

The Digital Transformation

The EU is committed to deliver digital solutions that:

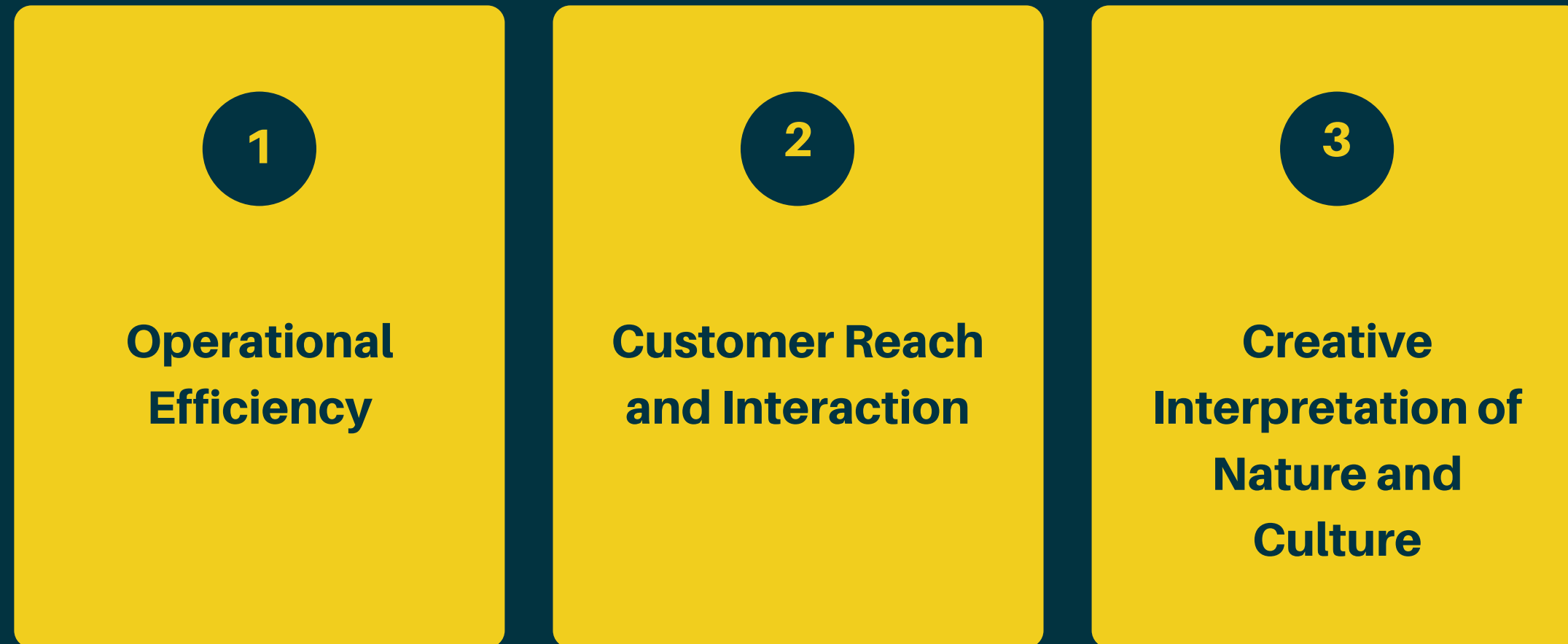
- put people first
- foster an open and democratic society
- will enable new opportunities for businesses
- facilitate a vibrant and sustainable economy
- **help fight climate change and achieve the green transition**

This involves **designing policies**, as well as **deploying innovative solutions** to give businesses the confidence, competences and means to digitalise and grow.



[Sourced from reform-support.ec.europa.eu/](https://reform-support.ec.europa.eu/)

This module divides the benefits of digital technologies into three categories:



Although the benefits of some technologies will fall into several categories, we will only mention them once, under what we consider to be their main benefit, but we will also list their secondary benefits.

The presentation of digital technologies is not meant to be exhaustive, but to give you an idea of possible directions to research technologies suitable for your business.

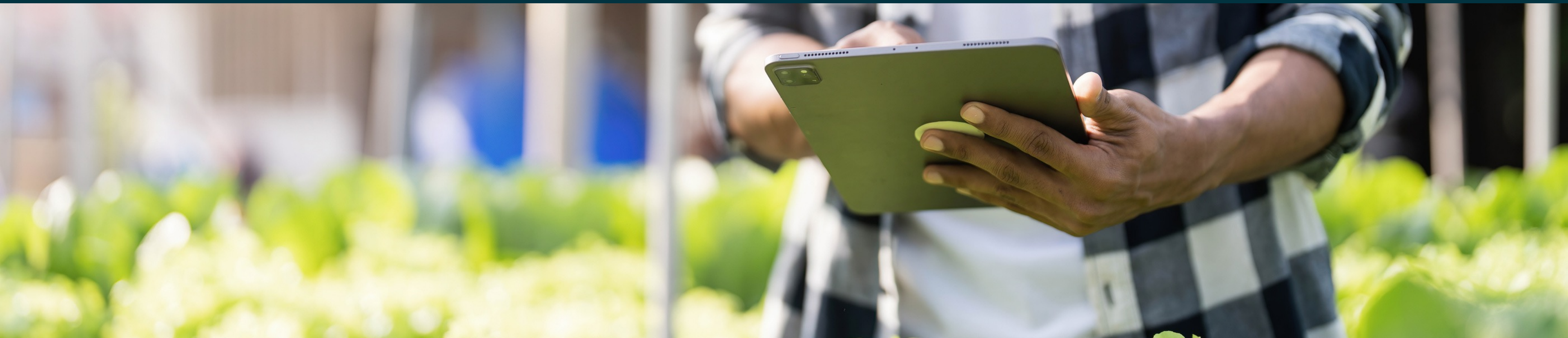
1

Operational Efficiency

This includes technologies that have to do with the internal functioning of your business.

These may:

- help you run your business more efficiently
- make your business more sustainable
- make your business safer



Business Management Software describes systems and applications designed as end-to-end solutions aiming to support, manage and automate business functions.

Because business management software is designed to support a range of industries and bring many kinds of solutions together under a single umbrella, there is no single business management solution that is the perfect fit for every use case.



Sourced from www.servicenow.com





[Customer relationship management \(CRM\)](#)

software helps manage all your company's relationships with individual people — including **customers, service users, colleagues, or suppliers** — throughout your lifecycle with them, including **finding new customers, winning their business, and providing support and additional services** throughout the relationship.



[Sourced from www.salesforce.com](http://www.salesforce.com)

As this field is fast evolving and people all over the world are investing and developing new technologies in the field of sustainability, it is wise to keep informed and be an early adopter.

Remember that, as an ecotourism leader, it is your duty to help clients have a more a sustainable holiday even beyond the interaction with your business!

This includes offering your clients, in advance or upon arrival, locally available apps that can make their stay more sustainable:

- apps that keep track of parking spaces to reduce the time spent looking for a parking lot and carbon emissions during that time
- bike renting apps or electric scooter apps which can let one know where free vehicles are located
- apps that can tell tourists which areas are most crowded, so they can plan their visits in such a way as to avoid overcrowding.



Ensuring accessibility is a key component of promoting sustainability and digital technology can help make spaces and activities more inclusive for people with disabilities.



For instance, some companies have developed apps that use tactile guide paths and QR codes with navigation instructions to help blind and visually impaired individuals navigate through spaces.

[Sourced from www.inclusivecitymaker.com](http://www.inclusivecitymaker.com)



Now it's your turn to think about the accessibility of your ecotourism business!

Exercise

“Making Your Ecotourism Business Accessible to All”



1

Consider the potential barriers that people with disabilities might face when engaging with your ecotourism activities

2

Research technological solutions that can help overcome these barriers

3

Reach out to support organizations in your area for more information on the specific needs and challenges faced by people with disabilities

4

Look for examples of ecotourism businesses that have successfully implemented accessibility solutions and consider applying these strategies to your own business

5

Implement the accessibility solutions that you have identified and promote your business as an inclusive and welcoming space for people of all abilities

2

Customer Reach and Interaction

This section refers to ways in which technology can help you find new clients, sell your services and grow your business.

The first thing to do is **establish an online presence**. Today no business appears trustworthy if it doesn't exist on the internet.



Create a website. Your website is the hub of your online presence, so it's essential to make it as visible as possible. Use meta keywords to describe your business and improve your search engine optimization (SEO). Make sure to include terms like ecotourism, sustainable tourism and other relevant keywords



Leverage high-ranking platforms. Listing your business on high-ranking websites like Airbnb or Booking.com can increase your visibility and help potential clients find you.



Invest in paid ads. Paid ads can boost your visibility by ensuring that your business appears among the first results in online searches.



Use social media. Create a business profile on social media platforms like Facebook, Instagram, Twitter, Tik Tok, to engage with potential clients, share updates about your business and promote special offers. Make sure to tailor your content to your target groups and create a consistent, recognizable, engaging identity.



Encourage online reviews. Positive reviews can attract new clients, while negative reviews can help you identify areas for improvement. Encourage satisfied clients to leave reviews on popular review sites like TripAdvisor or Yelp.

Implement online booking. Make it easy for clients to book your services by implementing an online booking system on your website. This can save time for both you and your clients.



Use chatbots. Chatbots can provide instant customer support and answer frequently asked questions, making it easier for potential clients to get the information they need.

Technology is not just limited to the tech industry, it has become a fundamental component of many businesses, including tourism. Online platforms, e-commerce websites, and social media all use technology such as supercomputing, big data, and AI to match audiences with services or products based on their preferences and behaviour while cybersecurity ensures the safety of payments and data.



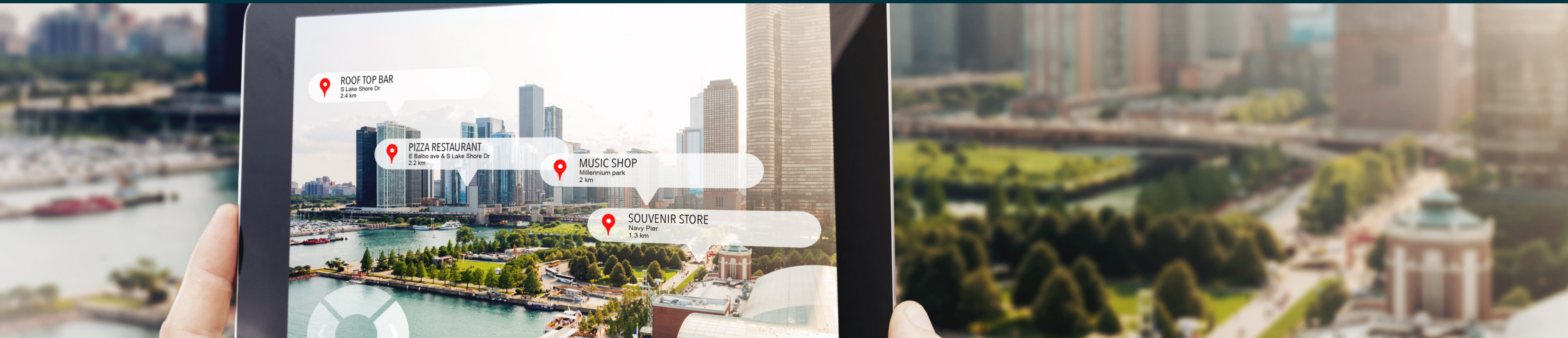
By recognizing how technology is integrated into sustainability, you can utilize these tools to grow your business while also preserving and regenerating the environment. Stay informed and continue to implement new technological developments in the field of sustainability to ensure the success and longevity of your ecotourism business.

3

Creative Interpretation of Nature and Culture

Apps can enhance the interpretative experience by adding value or providing detailed information. Consider incorporating the following apps into your ecotourism business:

- **Identification apps:** These apps can assist visitors in recognizing and learning about the plants, birds, mushrooms, rocks, or other natural features in your area. They provide detailed information about each item, including images, characteristics, and other relevant data.
- **Guided tour apps:** making it easy for visitors to explore and learn about the local ecosystem, culture, and history.



Virtual Reality (VR) is a technology that immerses the user in an entirely artificial world, which has the illusion of reality.



[Sourced from
www.hotelmanagement-
network.com](http://www.hotelmanagement-network.com)

Consider incorporating VR into your ecotourism business to create a more immersive and engaging experience that enhances visitors' understanding and appreciation of the natural and cultural resources in your area. This can be achieved through **virtual reality tours** of tourist sites and more interactive maps of natural landscapes and cities also known as **virtual reality maps**.



Augmented Reality (AR) is an enhanced, interactive version of a real-world environment achieved through digital visual elements, sounds, and other sensory stimuli via holographic technology.

AR incorporates **digital and physical worlds, real time interactions, and accurate 3D identification of virtual and real objects.**



Sourced from
<https://dynamics.microsoft.com>



By integrating AR into your ecotourism business, you can enhance the interpretative experience in various ways, such as:

- Showing clients what a landscape used to look like or what it will look like
- Using AR for directions or to map a route
- Offering guided tours that include information and stories about places through AR apps.



Gamification refers to the application of game-design elements and game principles in non-game contexts.



Sourced from www.gamify.com

One way to incorporate gamification into your ecotourism business is by using guided tour apps that combine mystery solving, storytelling, and sightseeing. Apps such as **Questo** offer a unique and engaging experience that can enhance visitors' appreciation and understanding of the natural and cultural resources in your area.





By combining apps, **VR, AR, and gamification**, companies are revolutionizing the way natural and cultural heritage is presented to visitors.

You can incorporate **existing apps** into your interpretation or partner with app companies to develop a **customized app** for your area or type of activity, enhancing the visitor experience and making your business more appealing to technology-savvy individuals.

These technologies offer an engaging and immersive experience that can deepen visitors' appreciation and understanding of the natural and cultural resources in your area.



Assistive technology is becoming increasingly important in enhancing accessibility and inclusion for people with disabilities.

With 84% of people with disabilities using a smartphone, more and more apps are being created to help them get around and experience nature and culture better.



You can also design your interpretation activity for different categories of people and use technology (QR codes, sensors, VR, AR) to offer them differentiated content, depending on their needs.



Blind and visually impaired visitors	<ul style="list-style-type: none">• verbal description by professionals• audio guides or explications• tactile models (VR)
Deaf and hearing-impaired visitors	<ul style="list-style-type: none">• text descriptions• subtitled videos• American Sign Language (ASL) interpretation
Visitors with a cognitive impairment	<ul style="list-style-type: none">• verbal descriptions by professionals• easy-to-read descriptions

[Sourced from www.inclusivecitymaker.com](http://www.inclusivecitymaker.com)



UNWTO's Digital Futures Programme



The United Nations too is taking an active interest in the creation of smart tourism.

UN's World Tourism Organization (UNWTO) has launched the **Digital Futures Programme** designed to **accelerate the adoption of new technology among tourism enterprises**. Developed in collaboration with some of the world's leading technology, finance and business companies (Amadeus, Mastercard and Telefónica), the initiative is focused on small and medium-sized enterprises (SMEs), which make up 80% of all tourism businesses.

UNWTO aims to reach at least 1 million tourism SMEs over the lifetime of the Programme, providing them with the foundational skills and knowledge needed to harness the power of new and emerging technologies.

[Sourced from www.unwto.org](http://www.unwto.org)



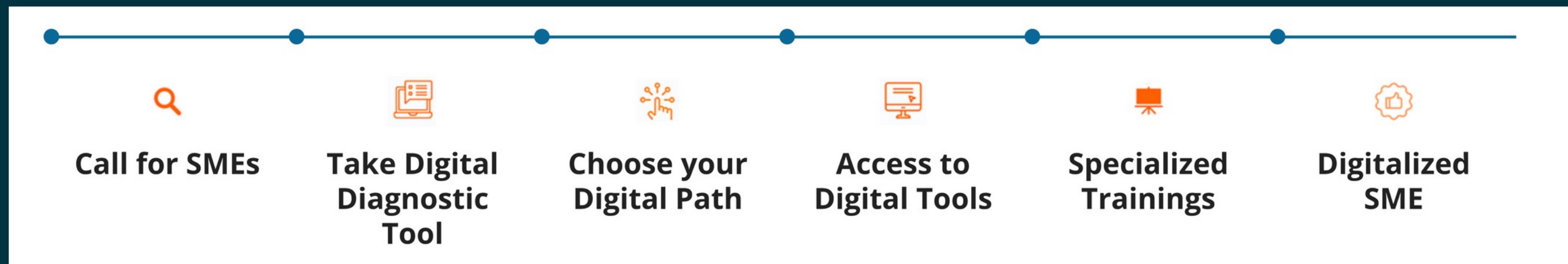
UNWTO's Digital Futures Programme

UNWTO Digital Futures is a platform where SMEs can access digital tools provided by top tech collaborators to transform the tourism sector and offers:

a Digital Readiness Diagnostic Tool to assess key strategic business dimensions and obtain expert recommendations.

5 Digital paths to accelerate economic recovery and increase your business resilience - Connectivity, Business Growth, E-Commerce, Big Data and Analytics, Payments and Security

Digital training needed to equip workforce



[Sourced from www.unwto.org](http://www.unwto.org)

Connectivity

The Connectivity path is crucial for many business functions today, providing SMEs with tools to manage and protect their IT infrastructure, build a business network infrastructure, and configure basic security and other connectivity services. It relates to our **Operational Efficiency** category.



Business Growth & E-Commerce

These paths equip SMEs and entrepreneurs with the tools to establish an online presence, market and grow their business on social media, and understand how to market in the digital space globally.

Specifically, the E-Commerce path equips SMEs and entrepreneurs with the necessary tools and training to securely accept online payments, obtain capital, and establish a digital presence. It also provides solutions for safeguarding businesses against cyber threats.

Both relate to our **Customer Reach and Interaction** category.



Big Data & Analytics

The Big Data & Analytics path empowers SMEs and entrepreneurs to leverage the power of data to make informed and timely decisions.

This path also provides tools to turn big data into actionable insights, enabling SMEs to make informed decisions and improve their business strategies.



Payments & Security

This path also covers the latest payment technologies and solutions, including online and mobile payments, to ensure that SMEs are up to date with the latest trends in secure and convenient payment options for their customers.



CONGRATULATIONS!

You now have the tools and knowledge for a meaningful digital transformation of your ecotourism business, enabling you to enhance the visitor experience, optimize resources, and scale your operations.

Remember to stay up to date with new technological developments and to continually assess and adapt your strategies to ensure your business remains competitive and aligned with your environmental mission.

With the right approach, you can leverage technology to help preserve and regenerate the environment while growing a successful ecotourism business.

